

CLAIMS

What is claimed is:

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1. A steerable machine for breaking up ground comprising:
a frame;
at least one pair of rollable front supports and at least one pair of rollable rear
supports, each of said front and rear supports including a chassis secured to the frame
10 and said front supports being rotatable about a front vertical axis and at least one of the
rear supports being pivotable about a rear vertical axis;
at least one driver's cab located in said frame;
a means for breaking up the ground connected to said frame;
traction means supported by said frame for rotating at least one of said
15 rotatable supports;
at least one first actuator⁹ operatively coupled to the rear supports;
a maneuvering system accessible from said driver's cab for operating the
actuator for rotating said rear supports about the rear vertical axis while turning the
front supports of the machine.
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2. The machine according to claim 1, wherein:
said chassis includes a yoke that supports said rear support, and has a vertical
pivot journal coupled to revolve on a support plate fixed to an end of a second actuator
integral with said frame.
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3. The machine according to claim 2, wherein:
said first actuator comprises a first hydraulic jack having a first rod end fixed to
said yoke and a first cylinder end,
wherein said rod slides, fixed to said plate.
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4. The machine according to claim 2, wherein:
said second actuator comprises a second hydraulic jack set with a vertical axis,
which has a second rod end fixed to said plate and a second cylinder end,
wherein said rod slides, integral with said frame.
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5. The machine according to claim 4, wherein:
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the cylinder of said second hydraulic jack is an integral part of said frame being connected thereto by means of a first articulation for moving said chassis with respect to a fixed point on said frame in order to move the rotatable support inward of said frame.

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6. The machine according to claim 1, wherein:
the chassis of said front supports are interlinked by means of a second articulation, at least one of said chassis cooperating with a third actuator for rotating the chassis around a vertical axis.

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7. The machine according to claim 6, wherein:
said third actuator comprises a third hydraulic having a third rod end pivoted to said chassis of said front support and a third cylinder end,
wherein said rod slides, pivoted on said frame.

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8. The machine according to claim 2, wherein:
said jacks comprise hydraulic two-way jacks connected to a distribution circuit of oil under pressure.

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9. The machine according to claim 8, wherein:
said distribution circuit comprises:
a first slide valve piloted by solenoid valves that supply said first hydraulic jack;
a third slide valve controlled by said maneuvering system of said machine
25 that supply said third hydraulic jack;
a first position detector cooperating with said first hydraulic jack;
a third position detector cooperating with said third hydraulic jack;
a position signal of said rear wheel or track;
an electronic control unit electrically coupled to said position detectors, to said
30 position signal and to said solenoid valves of said first slide valve.

10. The machine according to claim 9, wherein:
said position detectors comprise potentiometric detectors.

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